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ABSTRACT

By presenting a brief overview of alternative approaches to career guidance programs, this publication was designed to serve state-level planners interested in reviewing the key concepts relative to career development and planning. The compact nature of the review should provide a ready reference for practitioners seeking alternative delivery systems for accomplishing career development. Alternative approaches which received speical attention are: (1) occupational exploration, (2) the developmental (K-14) approach, (3) systems approaches, and (4) computer-assisted approaches. Also included is a discussion of considerations and recommendations based on extrapolations of current and future options. (JS)

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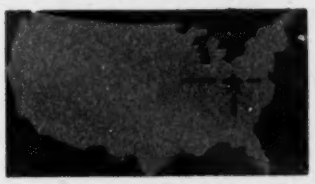
CAREER GUIDANCE

An Overview of Alternative Approaches



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preface

This publication is designed to serve state-level planners interested in reviewing the key concepts relative to career devlopment and planning. The compact nature of the review should provide a ready reference for practitioners seeking to ascertain alternative delivery systems by which career development may be accomplished. Much has been written on this topic, however, the authors have been selective by citing references believed to be especially useful to administrators.

A basic reference available from The Center on a related topic is the *Review and Synthesis of Information on Occupational Exploration,* by Wesley Budke.

The profession is indebted to Robert Campbell and Louise Vetter for their scholarship in the preparation of this report. Recognition is also due Kenneth Hoyt, University of Maryland and Aryes D'Costa, Ohio State University for their critical review of the manuscript prior to its final revision and publication. J. David McCracken, Information specialist at The Center, coordinated the publication's development.

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introduction

Traditional counseling (one-to-one and/or group) has been quite successful with the college-bound student population. However, despite the dedicated efforts of many guidance professionals, traditional approaches for assisting youth in planning for the world of work have been deficient in student impact. Alternative approaches for career development and planning are needed which incorporate a broader spectrum of variables such as new techniques and methods, systematic program management, consideration for special populations, innovative models for training career development personnel, and program evaluation. Clearly, new roles and the optimal use of existing roles is required.

Over the past few years, a number of authorities both within and external to the field of vocational guidance have examined the state of the field from different perspectives. Herr (1968) summarized a series of national conferences. Shertzer and Stone (1966) discussed problems from the standpoint of the practicing counselor. Campbell (1968b) did a national survey of guidance programs which studied the points of view of school counselors, administrators, students and parents. Ginzberg (1970) presented the perspective of a national professional service. Rosen (1969), Super (1969), Gribbons and Lohnes (1969), Crites (1969), and Campbell (1968a) examined the career development viewpoint. Hansen (1970) summarized career guidance practices in school and community. Ehrle (1969) synthesized a general overview.

Almost all of the above conclude that vocational guidance is in urgent need of modernization to maximize student impact. Some professional leaders recommend program reorganization; others argue for a closer alliance between counselor education and practice; while still others suggest a considerable reduction of the time lag in the program adoption of research findings to practice. There are also pleas for more "social relevance" in vocational guidance programs; more public support; evaluation systems to judge the effectiveness of systems; student behavioral objectives for career development program planning; and more effective impact on target populations such as the disadvantaged, non-college bound youth, and women returning to the labor force.

Wilensky (1966) points out that an orderly career pattern is restricted to a small minority of the labor force. Recent longitudinal career pattern studies confirm his findings and point to the large amount of occupational floundering experienced by a large percentage of the labor force (Gribbons and Lohnes, 1969, and Super, 1967). Many of the "flounderers" are from such special groups as the disadvantaged, women, older workers, and minority ethnic groups.

A number of studies (The Advisory Council on Vocational Education Report, 1968; Campbell, 1968b; Riccio and Walz, 1967; Rosen, 1969; and

Ryan, 1969) have pointed out that 1) counselors do not have enough specialized training for serving the non-college bound; and 2) more thought should be given to alternative approaches to career guidance.

Purpose

The purpose of this publication is to present a brief overview of alternative approaches to career guidance programs. No discussion of traditional face-to-face or group counseling procedures is included. A reading list of major sources for further reading is given in Appendix A. The bibliography included is deliberately selective; it includes only those materials used directly in the preparation of this report. Program developers, teacher educators, administrators, counselor educators, and researchers who are interested in further research development, and diffusion of innovative approaches to career guidance should find the material particularly pertinent.

alternative approaches

In order to achieve the objective for which this report was written, this section will be divided into two areas. First, exemplary alternative career guidance approaches will be considered. The second section will include recommendations for extrapolations of current exemplary approaches and explorations of possible future systems external to the "establishment."

To avoid misinterpretation, "alternative approaches" will be defined as follows: alternative career guidance approaches are different from the traditional guidance model in that they will deliver on student outcomes; they incorporate all available resources (including present state of knowledge); they provide for self-evaluation, self-renewal; and are future oriented.

Exemplary Alternative Approaches

Four types of alternative approaches will be discussed. They are: occupational exploration, the developmental (K–14) approach, systems approaches, and computer-assisted approaches. Examples of specific ongoing programs of each type will be included, although discussion of each program will be limited. The reader is urged to consult the original sources cited for more information about each program.

To facilitate discussion, the following is organized around four topics, but the actual division of guidance practices is not quite that clear-cut. For example, developmental approaches may or may not use a systems ap-

proach; occupational exploration approaches may or may not utilize computers; systems approaches may incorporate occupational exploration, developmental approaches, and computers, etc.

Occupational Exploration. Budke (1971) defines occupational exploration as "organized educational efforts directed at exposing students to a wide spectrum of career occupations through discussion, films, resource persons, and field trips as well as exploration of their interests and abilities through participation in manipulative skills and simulations in a laboratory or work setting."

From an extensive review and synthesis of information on occupational exploration programs, Budke (1971) offers the following conclusions:

1. Little research on specific occupational exploration is available; however, considerable material in the area of vocational development (with indirect application to world of work activities) was found.
2. Greatest emphasis appeared to be on the development of world of work programs and activities at the elementary school level.
3. At present, programs in the junior high school are most numerous and highly developed.
4. There is a definite trend toward comprehensive programs or master plans for education. These programs include association with the world of work in the elementary school, orientation to the world of work in the middle school, exploration of the world of work in grades nine and ten, and in-depth exploration of career clusters and skill development in the eleventh and twelfth grades.

Hansen (1970) includes an extensive discussion of programs in her monograph on career guidance practices in school and community. An annotated bibliography on facilitating career development (Bailey, 1970) also contains numerous references.

A sample of programs now underway would include the Detroit Developmental Career Guidance Project (Leonard, 1968); the Atlanta, Georgia Occupational Information Materials Project (Cook, 1968); the Rochester, New York Project BEACON (Stiller, 1968); the Appalachia Educational Laboratory SAVIS—Self-Administering Vocational Information System (Andros, 1967); and the Oregon SUTOE—Self Understanding Through Occupational Exploration—Program (Oregon Board of Education, 1969).

Media used in occupational exploration are varied, ranging from projected materials such as films and slides through games which provide simulations and problem solving, curricula which provide work experiences, and decision-making exercises on computers.

The University of Pittsburgh Communication in Guidance Project (Martin, 1967) involves the use of slides, filmstrips, video tapes, and movies. Examples of the games approach include the Life Career Game

(Boocock, 1967) and Vocational Simulation Kits (Krumboltz, 1968). The Industrial Arts Curriculum Project (1969) provides exploratory experiences for boys of junior high age. Although no girls have been included in the field testing to date, it would seem reasonable to provide such experiences for girls. Super (1970) edited a book on computer-assisted counseling which includes discussions of several exploration systems.

Developmental (K–14) Approach. Hansen (1967) lists the following knowledges and skills needed by a student in a developmental curriculum:

1. Knowledge of the nature of career development itself—a process which is psychological, tentative, continuous and changing.
2. Knowledge about the structure and trends of the labor force—obsolescent jobs, demand fields, new occupations, cybernation, and automation.
3. Skill in the process of decision-making—understanding of the possible, the probable, the desirable, the risks, and the strength of return of certain options.
4. Skill in synthesizing self-appraisal data and career information into a meaningful concept of self—developing exploratory hypotheses, testing them out, and evaluating them in relation to one's abilities, values and goals.

A developmental program in vocational education, presented by Bottoms and O'Kelley (1971), indicates that the guidance program should be designed to help students personalize the meaning of their vocational experiences at each educational level and to assist them at key decision-making points. The counselor is visualized as a resources consultant to teachers in integrating career-oriented experiences into the curriculum and in advising teachers on how to help students interpret the meaning these experiences may have for them. Placement and follow-up would also be necessary components of a developmental system.

Marland (1971), U.S. Commissioner of Education, indicated that he believes all education should be defined as career education. If such a change in focus is adopted by the educational system, it will be crucial to provide superior career guidance.

The program which is under development in Georgia is described by Bottoms and O'Kelley (1971). Ohio and Oregon are two other states which are in the process of developing a K–12 program for career orientation.

Computer Assisted Guidance. Loughary (1970) details five types of computer-assisted guidance programs. They are:

1. Information storage and retrieval systems
2. Library systems
3. Supper-support systems (e.g., national work placement)
4. Counseling systems
5. Personal utility systems.

The first three systems are basically information-providing devices. The final two, not much beyond the conceptual stage at this point, could possibly provide many of the routine functions which the counselor provides today.

Tiedeman estimated that there have been approximately 14 different experimental computer-based vocational guidance systems. Most of these are identified in the U.S.O.E. publication, Computer-based vocational guidance systems, 1969. Examples of these include ECES (Educational and Career Exploration System, Minor, F. J.; Meyers, R. A.; and Super, D. E., 1969); ISVD (Information System for Vocational Decisions, Tiedeman, D. V., *et al.*, 1970); CVIS (Computer-assisted Vocational Information System, Harris, J., 1967): and SIGI designed to serve Junior College students (System of Interactive Guidance and Information, Katz, M. R., 1970).

According to Harris, *et al.* (1971) the presently available computer-assisted educational and vocational guidance systems can be divided into the following four types:

1. Indirect inquiry systems;
2. Direct inquiry systems without system monitoring;
3. Direct inquiry with system monitoring; and
4. Direct inquiry with system and personal monitoring.

The basic purpose of all present computer-based guidance systems is to permit inquiry concerning facts bearing on a particular type of institution or realm of activity, such as colleges, vocational-technical schools, financial aids, and occupations. The data file examined in a computer-based system is ordinarily somewhat independent of the system or program necessary to make the data available to the user. In distinguishing among types of computer-based systems the emphasis is then placed on the scripts and programs which enable the user to tap the data files.

The computer as a tool for career guidance offers a great deal if used wisely. As Harris has pointed out, based upon her rich experience with computers, the guidance staff has to carefully monitor the total guidance program to achieve an optimum blend of man and machine. There can be a danger of relying too heavily on the counselor or the computer for specific tasks; the critical balance involves the appropriate complementary selection of each.

Several additional problems have delayed the wide-scale adoption of computers. One of these is cost. Most schools cannot afford the expensive outlay, but it is very likely that in time solutions such as cost-sharing, and less expensive hardware will emerge. The other problem involves training counselors to accept and use computers. Little effort has been expended thus far to familiarize counselors with them. Wide-scale adoption cannot occur without major educational thrusts.

The recently created commission on computer-assisted guidance systems sponsored by the National Vocational Guidance Association published

their first report (Harris, *et al.*, 1971). The report is intended to provide practical guidelines for those considering the adoption of computer-based vocational guidance systems and as such poses a series of "down-to-earth" questions to aid the decision. Many of the questions relate to thinking through the potential usefulness of computers to the present guidance program. In addition to guidelines, the report contains an extensive bibliography.

Systems Approaches. The systems approach can be defined as the selection of elements, relationships, and procedures to achieve a specific purpose (Hare, 1967). Noneducational examples include roadmaps (to reach a specific destination), office procedures (to communicate information), and personnel and equipment combinations to achieve a defense mission or to assemble a product for a corporation.

The primary advantage of using "systems" is increasing the probability that a given goal will be achieved. The entire approach is target oriented. Systems models show relationships and flow from start to finish and facilitate the management and monitoring of a program. Problems and impediments to achieving the goal can be spotted, modifications installed, resources shifted, and deadlines adjusted. The systems approach identifies alternative methods for achieving a goal, creates a searching attitude, insures "backup" plans if the primary plan breaks down, and has procedures for determining the success of the program built into the system. Through trial installation, monitoring, and feedback, a program is continuously assessed to determine the degree to which it is achieving its initial goal.

Although the systems approach has been with us for a long time, application of the approach to career guidance has been only within the past several years. Pioneer operational models have been developed by Campbell, *et al.*, 1971; Dunn, 1970; Flanagan, 1971; Herr, in press; and Hosford and Ryan, 1970.

The Campbell, *et al.* systems model for career guidance grew out of a national survey of vocational guidance conducted in 1968 which concluded "if guidance programs are to be effective they must be systematically designed to achieve stated but limited objectives selected from a much larger set of possible objectives."

The model, based on a systems approach, a) emphasizes student behavioral objectives, b) gives alternative methods for accomplishing these objectives, c) provides program evaluation strategies, d) incorporates guidelines for program change adjustments, and e) can be operationally demonstrated in pilot locations and subsequently replicated in other locations. The model consists of 10 procedural phases, each phase reflecting an aspect of the systems approach (such as defining student behavioral objectives, generating vocational guidance methods, and implementing and evaluating the program).

The model was developed over a two-year period in cooperation with a comprehensive senior high school. The project team included staff of The

Center, consultants, an advisory committee, and representatives from the public school system in which the model was being developed. The project team embraced a wide range of expertise, e.g., guidance counselors, school administrators, job placement specialists, and students.

Although described in a high school context, the model has been designed for flexible use at many levels such as the state guidance system, the local school system, and/or the county or area school system. The basic model is not restricted to vocational guidance and has utility for other aspects of the educational system. All 10 phases do not have to be adopted as a total package; each phase is independent and can be adopted in accordance with individual needs.

Since the model has not been field tested, the model described in the report is viewed as an interim version. A revised model will be published following extensive field testing during the next two years.

The 10 phases are outlined below:

Phase I—Context Evaluation
Phase II—Assigning Program Goal Priorities
Phase III—The Translation of Goals to Student Behavioral Objectives
Phase IV—Input Evaluation: Method Selection
Phase V—Input Evaluation: Selection of Techniques
Phase VI—Diffusion: Trial Implementation
Phase VII—Process Evaluation
Phase VIII—Product Evaluation
Phase IX—Adoption
Phase X—Recycling

According to Hosford and Ryan (1970) the critical component for the systems approach (in counseling programs or in any program) is the definition of the product or outcome of the system in behavioral (performance) terms. They list the following functions for a model for developing a counseling and guidance program:

1. Study real-life environment
2. Define problem situation
3. Establish parameters of program
4. Design counseling/guidance program prototype
5. Simulate to test program prototype
6. Pilot-test model
7. Introduce system
8. Operate system
9. Evaluate system
10. Eliminate system.

Dunn and Flanagan have developed a very comprehensive individualized guidance system as a component of Project PLAN. The guidance component entitled a Comprehensive Career Guidance System (CCGS) employed a systematic approach to develop and to evaluate guidance-oriented objectives and related instructional and counseling experiences for youth. The ultimate aim is a comprehensive data bank of behavioral objectives, each keyed to a variety of appropriate instructional, counseling, and evaluational materials and procedures available for student, parent, counselor, and teacher use. With such a bank, guidance personnel should be better able to individualize guidance services and, hopefully, help education in general adjust to the separate needs of each student. It is predicted that during the 1970's, as public and private schools move more and more in the direction of individualized education, greater emphasis will have to be placed upon individualizing youth development and career (i.e., life) planning assistance.

The systematic approach used in the development and evaluation of objectives-based programs in the CCGS involved five types of activities:

1. Identification of youth development needs; translation of these into behavioral objectives which state desired youth outcomes.
2. Classification of objectives by commonalities and priorities which serve as guidelines for the design of guidance and counseling programs.
3. Specification of all possible alternative strategies which could be used in individualized instructional and counseling programs and bring about student attainment of previously specified objectives; selection of strategies which seem most appropriate for groups of related objectives and groups of youth who have similar learning characteristics.
4. Design, scheduling, and implementation of selected strategies by organizing instructional and counseling materials and procedures into individualized learning units.
5. Evaluation of the efficiency and effectiveness of such units in helping students achieve the desired terminal outcomes specified in each unit's behavioral objectives; corrective feedback to make modifications in products and procedures developed and used in previous activities.

In regard to the first two activities just outlined, one method for grouping youth needs and objectives is by areas of a person's life (i.e., total career). Preliminary investigation led to the identification of the following six content areas of youth needs:

Vocational. Behaviors related to exploring and making decisions concerning both opportunities in the world of work and personal characteristics related to such opportunities.

Educational.	Behaviors required for exploring, making decisions concerning, and pursuing the amount and kind of education and training one wants during school and throughout the rest of life.
Personal-Social.	Intrapersonal competencies needed to function effectively as an independent person *and* interpersonal behaviors needed in small group situations, including two-person relationships. Behaviors applicable to various settings including home and classroom.
Academic-Learning.	Behaviors involved in handling varied learning tasks more effectively and efficiently. Learning how to learn in varied settings, not just in the formal classroom.
Citizenship.	Behaviors differentiated from those in the social behavior area because they are appropriate to secondary (e.g., government) rather than primary (e.g., family) social groups and systems.
Leisure.	Behaviors connected with the exploration and utilization of leisure, cultural, and recreational pursuits.

Considerations

Several cautions should be suggested at this point: 1) it would be unwise to impose a rigid national model for career development and planning. Many institutions prefer "doing their own thing" and as evaluations are completed, more options will be available. 2) Technology is best used as a tool, not as an excuse for instituting a program. If computers, overhead projectors, etc. will help to implement a well-planned program, use them. If not, don't. According to Walz (1970), "The future of guidance may very well depend upon the capacity of counselors individually and collectively to utilize technology in such ways that minimize the negative consequences and maximize the positive outcomes" (p. 182). 3) Guidance personnel education (both preservice and in-service) is critical. If guidance personnel are not aware of new advances and are not prepared to cope with them, the programs will never get off the ground.

Recommendations

Recommendations will be discussed under two major topics, extrapolations of current options available and future options.

Extrapolations. The major concern about alternative approaches for career guidance is that present methods often do not meet the needs of the students. How much better will the alternative approaches discussed earlier be? At this point, a definitive answer is not available. Many of the experi-

mental systems developed are not yet beyond the field-testing stage. When a program has been implemented, evaluation of it as an operational possibility will need to be completed. When systems have been evaluated and found efficacious, there is still the problem of implementing the system in the schools. Many persons (administrators, school boards, parents, counselors themselves) have to be convinced that such a program would make their school a better one. Given that such acceptance is obtained, the problems of cost, particularly for the systems which rely heavily on technology, remain.

Another problem with acceptance of alternative systems is the very real fears of human exploitation which arise whenever the introduction of technology into schools is discussed. Dworkin (1970), Tiedeman and Schmidt (1970), Oettinger (1969), Brickman and Lehrer (1969), and Lifton (1970) all speak to the problem. No real conclusions are reached, except that everyone needs to be concerned about the possibilities for dehumanization and that the danger is much less when people are informed. The glamour of the machines must not be allowed to substitute for concern for the individual's own growth and development.

A third area of concern is the need for training professionals for implementing the innovative approaches. Changes must be considered, in terms of the kinds of educational programs provided and also in the kinds of workers needed. Perhaps a series of specialties should be developed, perhaps more thought should be given to the use of paraprofessionals, perhaps career planning should become part of the curriculum that the classroom teacher presents. Another possibility would be better integration of the career planning function among the schools and industry and community service organizations.

To emphasize the foregoing, three major recommendations are suggested:

1. Meeting student needs with programs which have passed the test of use and evaluation.
2. Protecting against the very real possibility of exploitation.
3. Training professionals for implementing the alternative approaches.

Alternative Futures. Traditionally there has been a time lag of as much as 50 years in the adoption of educational innovations. If this is the case, is it meaningful to talk about what the future holds for alternative delivery systems for career development and planning? It can be, with the stipulation that what is being discussed be forecasts for possible futures (a number of alternatives) rather than predictions of a specific future.

An extensive array of literature exists in the area of forecasting futures. Perhaps the best survey of possible futures for our country is presented in Harman (1970). Two possible ways he sees the country moving toward are to the "second-phase industrial" society, and to the "person-centered" society.

In the "second-phase" industrial society, emphasis would be placed on the role of education in accomplishing social goals and alleviating social problems (poverty, racial discrimination, environmental deterioration, etc.). "Behavior-shaping" approaches, involving detailed specification of desired behaviors to be imparted by contingency-management techniques, will be important. Continuing education, in the form of vocational retraining, will also have an important place.

Educational goals that would be emphasized in a "person-centered" society include teaching students to become effective thinkers and learners, and developing their inquiry and problem-solving skills, social skills, and emotional awareness and self-identity. Education would be designed to foster feelings of safety and trust, to promote freedom to explore and inquire, and to provide a responsive environment and directed challenges. There would be reduced emphasis on absorbing specialized information and on developing specific vocational skills.

In speaking directly to the question of the future of guidance, Cooley (1969) states: "The probable nature of the future school must be considered along with the probable nature of future guidance functions as we plan computer systems for the schools of tomorrow" (pp. 61–62). He sees the school moving in the direction of individualization of instruction within the next 10 years and states that computers can provide the necessary feedback for managing individually planned instruction as well as the necessary feedforward information needed in the guidance process. (Feedforward information is that information which the student needs to set goals and develop plans to achieve those goals.)

Another possible future for the schools is indicated by Marland (1971), who states that "all education is career education, or should be." He sees the universal goal of American education as being that every young person completing grade 12 be ready to enter higher education or to enter useful and rewarding employment. The question, according to Marland, is this:

> Shall we persevere in the traditional practices that are obviously *not* properly equipping fully half or more of our young people or shall we immediately undertake the reformation of our entire secondary education in order to position it properly for maximum contribution to our individual and national life? (p. 6)

Daley, President-Elect of the American School Counselor Association, put it this way:

> Maybe we need to go back and look at what we've done and how effective we've been. If we have anything to account for at all, maybe we need to revamp everything we're doing in counseling, and come up with a completely new model altogether.

The Counseling and Personnel Services Information Center has prepared a bibliography, Counseling in the Future (1970) which is part of a

special issue of the CAPS *Capsule* which is entitled, "A Look to the Future."

Almost everyone is agreed that changes need to be made. The question is, what changes, and then when. Harman (1970) states, and we agree, that choices are not necessarily what the society or its leaders may declare them to be. Choices are inferred from where the society puts its resources. Where will we put ours?

summary

The purpose of this paper was to look at alternative approaches for career guidance, after documenting the unsatisfactory status quo. The material in this report, supplemented with the sources listed in the bibliography, should aid program developers, teacher educators and researchers who are interested in further research, development, and diffusion of career guidance systems.

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MISSION OF THE CENTER

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The Center's mission is to strengthen the capacity of state educational systems to provide effective occupational education programs consistent with individual needs and manpower requirements by:

- Conducting research and development to fill voids in existing knowledge and to develop methods for applying knowledge.
- Programmatic focus on state leadership development, vocational teacher education, curriculum, vocational choice and adjustment.
- Stimulating and strengthening the capacity of other agencies and institutions to create durable solutions to significant problems.
- Providing a national information storage, retrieval and dissemination system for vocational and technical education through the affiliated ERIC Clearinghouse.